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0. Introduction

The assumption that the D (= Determiner) is actually the head of a nominal phrase leads us to interesting observations as suggested by Abney (1987), Fukui (1986), among others. This theory surely captures the generalization about the syntactic status of the inflectional systems in the sentence and in the nominal phrase. In this paper, I will try to adapt the DP-Hypothesis to Japanese, a language for which no one (as far as I know) denies the existence of INFL in the sentence. In particular, I argue that in a head-final language like Japanese, the nominal-phrase-final inflectional element, a case-marker, is a D.[1]

For example, a simple nominal phrase like *Naomi-ga* (Naomi-NOM) has a structure like (1), with *ga* (NOM) as a head:

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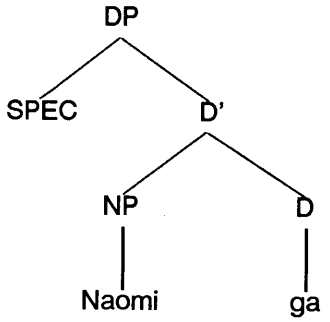
1. Juan Uriagereka pointed out to me that there is a possibility that the functional head in question is actually K (= Kase), not D. I will not take this option because of two reasons. First, there is no way to tell which category a phrase-final functional head belongs to, as we cannot find anything other than case particles (and some quantifiers which do not cooccur with a case particle) that might function as the functional head at the end of the nominal phrase. (See Fukui (1986) for discussion.) Second, I am taking the standpoint of Fukui (1986) that Kase is a **feature** that is given by the head, and does not necessarily have an independent syntactic status.

(1)



As a consequence of such an analysis, we are led to interesting generalizations about Case-Marker Drop phenomena discussed by Saito (1983, 1985) and unaccusativity phenomena discussed by Terada (1986, 1987), and interesting observations about the distribution of non-specific distributive quantifiers. An account for these phenomena follows from the following assumptions: (1) The case marker is a D in Japanese; (2) Some types of quantificational expression are also a D in Japanese; (3) There are at least three types of "subjects[2]" depending on the types of verbs--SPEC(I), SPEC(V) and COMPL(V); (4) Unless it is overtly marked by a case marker, the Japanese nominal phrase requires an abstract Case-marking by the verb. (See Saito (1983, 1985).); (5) SPEC(I) is ***not*** lexically governed.

In Tateishi (1988b), I discussed Adjective Movement in Japanese. As you can see in (2), in Japanese, we can say either 'John's red shirt' or 'red John's shirt'. This has been one crucial piece of evidence for the claim that the nominal phrase structure in Japanese is non-configurational. (See Gil (1987).)

(2) a. John-no akai shatsu
John-GEN red shirt
"John's red shirt"
b. akai John-no shatsu

However, if you consider (3), you can see that Adjective Movement is not allowed if the genitive element is wh, *dare* 'who'. 'Whose red shirt' is acceptable, but 'red whose shirt' is ungrammatical.[3]

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2. By using the term ***subject***, I do not mean that there is actually a syntactic position *subject* as defined in a sense of Relational Grammar. The only thing that I want to argue in this paper is that there are three different positions which the most external argument of a predicate can sit in. The analysis in this paper is totally independent of the existence of the notion "subject" in the syntactic theory.

3. Kubo (1987) also pointed out this fact. She also pointed out that if two wh-phrases are stuck at the top of the nominal phrase, the result is better.

(i) [**Dare**-no **naniiro**-no shatsu-o] John-ga nusun-da-no?
who-NOM what color-GEN shirt-OBJ John-NOM steal-PAST-Q
"*Whose what color shirt did John steal?"

However, I want to dispute the validity of this data. I have a strong intuition that the second wh-phrase in (i) *naniiro-no* "what color" is definite and specific, meaning "which color", ***not*** "what color". If this is true and if Pesetsky's (1987) distinction between D-linked (= quantificational) and non-D-linked wh-phrases is correct, then it might turn out that the second wh-phrase does not undergo LF Wh-Movement at all. If so, then it turns out that we must still maintain the hypothesis that two quantificational wh-phrases are not allowed in the Japanese nominal phrase in any context. As supporting evidence for this, if there is an adverbial clitic element *ittai* "in the hell", which makes a wh-phrase quantificational, immediately before *naniiro*, for some speakers including Kubo herself the result is ungrammatical.

(continued...)

(3) a. [**Dare**-no akai shatsu-o] John-ga nusun-da-no?
who-GEN red shirt-OBJ John-NOM steal-PAST-Q
"Whose red shirt did John steal?"
b.*[Akai **dare**-no shatsu-o] John-ga nusun-da-no?

This observation leads us to conclude that we must cast doubt on the non-configurationality hypothesis. If the structure inside the nominal phrase is flat, then there should be no difference between the two sentences, because there is no **structural** difference.

Suppose we say that NP or DP is a barrier. It is generally assumed that an overt SPEC blocks extraction out of a barrier, as you can see from the initial observation in Ross (1967).

(4) a. Who$_i$ did you see [[$_{SPEC}$e] pictures of t_i]?
b.*Who$_i$ did you see [[$_{SPEC}$***John's***] pictures of t_i]?

In an analogous way, we can hypothesize that an adjective moves to SPEC(D). Consider (5). In (5)b, the landing site of LF Wh-Movement is already filled in, so the existence of the wh-phrase inside a DP with Adjective Preposing is ruled out.[4]

(5) a. [$_{DP}$[$_{SPEC}$e][$_{NP}$***dare-no*** akai shatsu] o]
b.*[$_{DP}$[$_{SPEC}$akai$_i$][$_{NP}$***dare-no*** t_i shatsu] o]

The analysis here contradicts Fukui's (1986) theory of Japanese phrase structure. Fukui claimed that a language has a SPEC position if and only if there is a functional category. Fukui argues that Japanese has no good candidate for D, therefore no SPEC inside a nominal phrase. For example, demonstratives and genitive phrases are in a free word order relation as in (6):

(6) a. kono John-no gengogaku-no ronbun
this John-GEN linguistics-GEN article
"*this John's paper on linguistics"
b. John-no kono gengogaku-no ronbun

Both 'this John's linguistics' article' and 'John's this linguistics' article' are grammatical in Japanese. Based on this observation, Fukui concluded that there is no D in Japanese.

I think that one point is missing in Fukui's argument--Japanese is a head-final language. The candidate of D, the head, must be found at the end, which leaves us ***only*** with case particles.[5] Therefore, in this paper, I assume that a case marker ***is*** Japanese D, and try to argue that this assumption is indeed correct.

1. Typology of Predicates in Japanese

Before going into the examination of the Case-Marker-as-a-D Hypothesis, let me

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3. (...continued)

(ii)*[**Dare**-no **ittai** **naniiro**-no shatsu-o] John-ga nusun-da-no?
who-NOM in the hell what color-GEN shirt-OBJ John-NOM steal-PAST-Q
"*Whose shirt with what color in the hell did John steal?"

Therefore, Kubo's data does not show that my initial observation about the distribution of wh-elements is wrong. Rather, further observations suggest that the line of explanation as in Tateishi (1988b) is on the right track.

4. Of course, as is the case with any theory of Wh-Movement as substitution, there is a problem with deriving sentences like *Who did what?*. I have nothing to say about this point, noting that in the case of double questions, the landing site of Wh-Movement is the final one, while in the case I am discussing, it is not the final site.

5. If we adopt the DP Hypothesis, of course.

introduce some works on the typology of predicates in Japanese, which will be crucial to the discussion in this paper.

1.1. Kuroda (1972)

Kuroda (1972) distinguishes two types of relations between an argument and the rest of the sentence, categorical judgement and thetic judgement. This is basically the distinction between a proposition with no prominent argument (= thetic judgement) and a proposition with a prominent argument, as in TOPIC-COMMENT/FOCUS-COMMENT structure (= categorical judgement).

For example, Japanese at least has four sentences corresponding to an English sentence *Ken ran*, one of which is "thetic" in Kuroda's sense.

(7) "Ken ran."
  a. Thetic Judgement
    Ken-ga hashit-ta.
    Ken-NOM run-PAST
  b. Categorical Judgement
    Ken-wa hashit-ta.
      -TOPIC
    --Statement about the topic ***Ken***.
    Hashit-ta-no-wa Ken-da.
      -(Nominalizer)-TOPIC -COPULA
    --Statement about the topic ***hashit-ta-no*** "the person who ran"
    "It is Ken who ran."
    Ken-***ga*** hashit-ta. (With a stress on *ga*)
    --Narrow scope focus interpretation on ***Ken*** (= "Exhaustive Listing")
    "It is Ken who ran."

(7)a is an example of the "thetic" judgement. By saying *Ken-ga hashit-ta*, the sentence simply describes the event of Ken's running, and there is no particular narrow-scope focus or topic in the sentence in the sense of Selkirk (1984). On the other hand, in (7)b, all of the sentences involve categorical judgement. The first sentence regards *Ken*, marked with *wa* (TOPIC), as a topic of the sentence. The second one takes *hashittano* as a topic, and the third one *Ken-ga hashit-ta* takes *Ken* as a narrow scope focus.

Now, if we turn our eyes to the typology of predicates, we can observe the following fact. With predicates like *hashit-ta* 'ran', a sentence can be interpreted in both ways, categorical and thetic, depending on the choice of the subject case marker. However, with generic stative predicates like *utsukushii* 'beautiful', the sentences always give the categorical judgement as in (8).

(8) "Naomi is beautiful."
  a. Naomi-wa utsukushii.
    --*Naomi* as a topic.
  b. Utsukushii-no-wa Naomi-da.
    --*utsukushii-no-wa* as a topic
    "It is Naomi who is beautiful."
  c. Naomi-ga utsukushii.
    --*Naomi* as a narrow-scope focus
    "It is Naomi who is beautiful."

Therefore, we must distinguish between two types of predicates, action and stative, based on Kuroda's observations.[6]

1.2. Terada and Unaccusativity in Japanese

In her series of papers, Terada (1986, 1987) argued that unaccusativity

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6. Kuno (1973ab) also observes similar patterns. I will refer to Kuroda's work throughout this paper partly because of the chronological factor, and partly because of its profound relevance to the content of this paper.

effects can also be attested in Japanese. She observed that there are two types of verbs in Japanese which behave differently in relation to the syntactic status of distributive quantifiers as subjects. Consider (9).

(9) In the distributive reading over events (one student per one event (= three events)):
a. Sensei-ga [$_{DP}$gakusei-o sannin] home-ta.
teacher-NOM student-OBJ three praise-PAST
"The teacher praised three students."
b. [$_{DP}$gakusei-ga sannin] ki-ta.
-NOM come-PAST
"Three students came."
c.*[$_{DP}$gakusei-ga sannin] hashit-ta.
run-PAST
"Three students ran."

In the distributive reading over events, an expression like *gakusei-ga/o sannin* 'three students' can occur as an object and as a subject of an unaccusative predicate like *kita* 'came', but ***not*** as a subject of unergative predicates like *hashitta* 'ran'.

Terada tried to account for the phenomena in terms of the difference in subject positions. She assumes that an unaccusative subject (and an object) is in COMPL(V) and is lexically governed, but an unergative subject is in SPEC(IP) and so is ***not*** lexically governed. Roughly speaking, she argued that QR at LF from a position not properly governed, an unergative subject, causes an ECP violation.

1.3. Diesing and Focus Projection in Japanese

Diesing (1988), in her paper on bare plurals and focus projection, argued that there are two positions for the subject of stative predicates, SPEC(V) and SPEC(I), and that the two subject positions have different semantic correlates. The subject of the stage-level stative predicate is in SPEC(V). In this position, *ga* (NOM) on the subject is interpreted as a wide-scope focus with the VP as a domain in the sense of Selkirk (1984). If there is *wa* (TOPIC) in this position, it will be a narrow-scope on the subject only. For example, consider the following:

(10) a. Kujira-ga mieru.
whale-NOM can be seen
"Whales can be seen."
b. Kujira-wa mieru.
-TOPIC
"Whales (but not dolphins) can be seen."

In a relatively stress-free context, (10)a with *ga* (NOM) is a description of the event as a whole, but (10)b with *wa* is taking *kujira* 'whale' as a narrow-scope focus.[7]

On the other hand, the individual-level stative predicate takes the subject in SPEC(I).[8] In this position, *ga* is a narrow-scope focus, and *wa* is a topic.

(11) a. Kujira-ga ookii.
whale-NOM big
"It is whales which are big."

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7. As the reader may immediately notice, the notion ***focus*** here is slightly different from the normal sense of the term. Here, *narrow-scope focus* is the term for the *focus* in the other literature . "*Wide-scope focus* with X as a domain" signifies that the domain X as a whole is interpreted as some kind of "focus" or "new information".

8. Note that Diesing does not assume that this SPEC(I) subject is base-generated in this position. Her intention is just to claim that there is some correlation between the syntactic position of subjects and its semantic interpretation. Actually, she cites many examples of two different interpretations with the same predicate depending on the context.

b. Kujira-wa ookii.
-TOPIC
"Whales are big."

For example, if we take the predicate *ookii* 'big', (11)a with *ga* is interpreted with a narrow-scope focus on *kujira*, but (11)b with *wa* is interpreted as prominence which is not a narrow-scope focus, hence topic.

Diesing's theory can be summarized as follows:

(12) a. VP is the domain of focus projection.
b. *Ga* is a marker of focus projection.
c. *Wa* is a marker of unprojectable prominence, topic or focus.
d. The interaction of the three properties:

	VP-Internal Position	VP-External Position
ga	Focus projects to the VP-domain. --wide-scope focus	Focus outside the projection domain --narrow-scope focus
wa	Unprojectable prominence inside the VP-domain --narrow-scope focus	Prominence that need not be a focus --topic

The fact that the focus can project up to a VP-domain supports the existence of a VP-internal subject.

1.4. Putting Them All Together

Kuroda distinguished verbs and statives, Terada distinguished unaccusative verbs and unergative verbs, and Diesing distinguished stage-level statives and individual-level statives. Each of them tried to capture the contrast of the two types of predicates. However, the two types of predicates they are contrasting are slightly different, though overlapping. Therefore, there seem to be more than two types of predicates with different types of subjects.

Related to this, in my past works (Tateishi (1988a,b)), I tried to argue that there are two positions for subjects in Japanese, SPEC(I) and SPEC(V), in the **S**-Structure.[9] One basis for this claim was that the so-called "multiple subjects" in Japanese are not so multiple. Consider the following:

(13) a. MIT-ga [gakusei-no hahaoya-ga] yoku tazuneru.
MIT-NOM student-GEN mother-NOM often visit
"It is MIT in which it is students' mothers who visit there often."
b.*MIT-ga [gakusei-no hahaoya-ga] bijin-ga yoku tazuneru.
beauty-NOM
"It is MIT in which it is students' mothers among whom those who are beautiful visit often."

As you can see from (13)a, we can have two subjects. If the "aboutness" relation allows an infinite number of subjects, we predict that (13)b should be grammatical, where we added *bijin* 'beauty' after the 'mother'. However, the result is ungrammatical. Therefore, even though it seems that we can freely generate multiple subjects, there should be some restrictions on the generation of multiple subjects.

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9. In this sense, the theory is different from Fukui's (1986) and Kitagawa's (1986). In Fukui's theory, all subjects in Japanese are generated inside VP, and in Kitagawa's theory, there is no SPEC(I) subject until LF.

Basically, SPEC(I) and SPEC(V) are the only positions for subjects in Japanese.[10]

In this paper, I will add another position for the subject. There are three positions for subjects: a sister-to-V subject for unaccusative predicates and stage-level statives, sister-to-V' subject for unergative verbs, and SPEC(I) subject for individual-level predicates. (See also Diesing (1988), Kratzer (1988) for the distinction of subject positions.) By assuming the existence of three types of subjects, I will go into the analysis of two interesting syntactic phenomena--Case Marker Drop and the syntactic distribution of the distributive quantifiers.

2. Case Marker Drop Problem

In this discussion of Case Marker Drop, I take Saito's (1983, 1985) observations as being right. Consider (14).

(14) a. Ken-(ga/*ϕ) Naomi-(o/ϕ) seme-ta.
Ken-NOM/*ϕ Naomi-OBJ/ϕ blame-PAST
"Ken blamed Naomi."
b. Ken-(ga/*ϕ) Naomi-(o/*ϕ) hageshiku seme-ta.
Ken-NOM/*ϕ Naomi-OBJ/*ϕ harshly blame-PAST
"Ken blamed Naomi harshly."

The sentence *Ken-ga Naomi-o seme-ta.* 'Ken blamed Naomi.' is grammatical without an object case marker *o*. However, the subject case marker *ga* can not be dropped. Interestingly, as you can see in (14)b, if the object and the verb is separated by an adverbial element like *hageshiku* 'harshly', *o* on the object can not be dropped. *O*-drop requires adjacency to the verb.

Saito analyzed the pattern as follows. First, DP without a case marker requires abstract Case, which only the verb can assign in Japanese. Second, Case assignment requires adjacency to the verb, so nothing can intervene between V and the bare DP. *Ga* can never be dropped because it is not an abstract Case assigned under government, but is some kind of default-like case which is assigned to non-Case-marked DPs. *O*-drop requires adjacency to the verb, because abstract-Case-assignment in Japanese, without a case marker, requires adjacency and sisterhood to the verb.

However, if we look at the pattern carefully, we can immediately see that Saito's generalization is not quite right. The subject of unaccusative predicates, which is also marked with *ga*, can freely drop the nominative marker *ga*.

(15) a. Onna-ga/ϕ ki-ta.
woman-NOM/ϕ come-PAST
"A woman came."
b. Onna-ga/ϕ mieru.
can be seen
"A woman can be seen."

In (15)a, both of *Onna-ga ki-ta* with *ga* and *Onna ki-ta* without *ga* are perfectly grammatical. (15)b is the same kind of observation with a predicate *mieru* 'can be seen'.

On the other hand, with unergative predicates and individual-level predicates, case-marker drop is worse, as Saito correctly predicts. However, if you look at the facts carefully, *ga*-drop with the individual-level predicate is far worse than with unergatives.

(16) a. Onna-ga/*ϕ hashit-ta.
-NOM/*ϕ run-PAST

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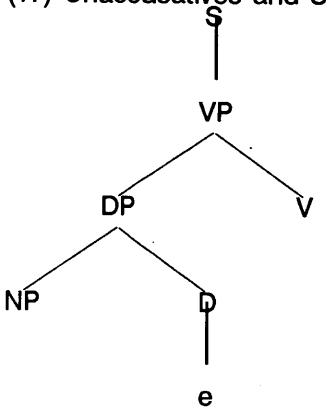
10. I am not claiming that three or more subjects are impossible in a single simple clause in Japanese. As discussed by Kuno (1973ab), provided that there is a potential genitive-head relation between the two of the subjects, there could theoretically be an infinite number of subjects. I am discussing the case of multiple subjects where such a genitive relation can not be detected in any sense.

"A woman ran."
b. Onna-ga/***ϕ utsukushii.
-NOM/***ϕ beautiful
"A woman is beautiful."

In (16)a, the subject *onna* without a case marker *ga* is surely worse than the case of unaccusatives. However, in (16)b with an individual-level predicate *utsukushii* 'beautiful', *ga*-drop is worse and impossible with a narrow-scope focus interpretation.

To account for these distinctions, I propose the following analysis. First, the Case-Marker Drop is an instance of DP with an empty D. Second, an empty D can only get an abstract Case in the sense of Saito (1983) and Kuroda (to appear), that is, the Case is assigned under government by a verb with adjacency requirement. Finally, the nominative case *ga* requires a morphological realization, no matter what the mechanism of its assignment is. Recall that the subject of unaccusative verbs and stage-level stative predicates is in the complement of the verb. In such a position, there is no problem with Case-Marker Drop. Even if the subject is with an empty D head, it is Case-marked by the verb.

(17) Unaccusatives and Stage-Level Statives



This hypothesis is supported by the fact that Case-assignment to the subject with an empty D requires adjacency to the verb, as you can see in (18)b, where the empty D and the verb *mieru* 'can be seen' is separated by a locative phrase *koko-kara* 'from here'.

(18) a. Onna-ga/ϕ mieru. (= (15)b)
b. Onna-ga/*ϕ **koko-kara** mieru.
here-from
"A woman can be seen from here."

Just like Case-marking to an object, Case-marking in this case requires adjacency to the verb.[11]

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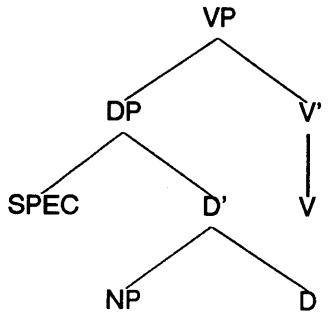
11. There is another possibility of analyzing the phenomena. The subject (or object) incorporates into the predicate in the case of Case Marker Drop. (Juan Uriagereka (personal communication)) Because there is an incorporation involved, the adjacency requirement is at work for the morphological reason. Also, the distinction between an unaccusative subject/object and an unergative/individual-level subject can be accounted for in terms of the proper lexical government of the trace of the head-to-head movement in the subject (object) position. This is a very attractive approach, but I will not take this option because of the following reasons. First, the accent patterns of the subject and the predicate after the Case Marker Drop is not altered at all, unlike normal predicate-predicate incorporation. (See Kitagawa (1986).)

(continued...)

How about unergatives? Recall the pattern in (16). Here, I will basically adopt Saito's account. An empty D is not Case-marked. Therefore, we will have an ungrammatical result. The subject in this case is a sister to V', not V^0. Therefore, V can not assign a Case to it. An empty D is ungrammatical because in such a position it is required that a case is morphologically realized by *ga*.

Why are individual-level predicates worse with *ga*-drop? First of all, the subject is ***not*** Case-marked, just like unergatives. Therefore, the reason can not be the Case-Filter violation. Note that an empty D is lexically governed as the subject of unergatives because it is inside VP as in (19).

(19)



V lexically governs D in (19).

However, the empty D in the subject of an individual-level predicate is ***not*** lexically-governed, as it is in SPEC(I) as in (20) and I is *not* a proper governor.

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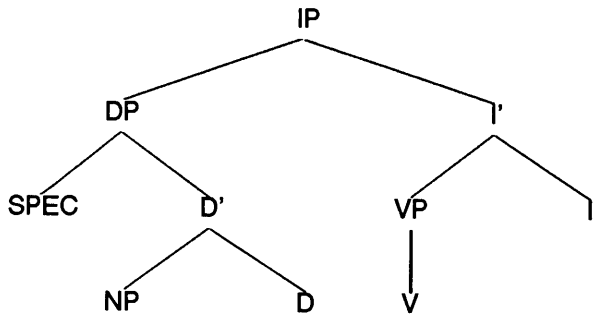
11. (...continued)

(i) a. Incorporation of Predicates
tábe 'eat' + sase 'cause' = tabesáse 'cause to eat'
b. Case Marker Drop
hísho-ga 'secretary' + iru 'exist' ==> hísho iru 'The secretary is there.'

There is a lexical alternation of accent in the case of predicate-predicate incorporation, while in the case of Case Marker Drop, there is not any such alternation and the intonation pattern remains phrasal. Given that there is enough amount of evidence that suggests components of complex predicates like causatives in Japanese must be syntactically separate at some syntactic level and that the complex predicates must be derived by syntactic incorporation (or inverse of it) of some sort (See Kuroda (1965), Inoue (1976), Kitagawa (1986) among others.), it is unlikely that incorporations at the same level (= syntax), if Case Marker Drop is a case of it, behave differently in phonology, even though they both involve the same kind of combination of words.

Second, the case-marker-as-a-D approach is independently necessary to account for the cooccurrence restrictions of some quantifiers with a case marker, as I will discuss later.

(20)



Therefore, an empty D in the subject of the individual-level predicate is an *ECP* (See Stowell (1981) for the same kind of argument with C.) violation in addition to the Case Filter violation. By assuming an empty D, we can account for the subtle difference of judgements about case-marker drop.

3. Distribution of Non-Specific Quantifiers as "Subject"

In the final part of this paper, I will show a phenomenon that shows a pattern similar to Case-Marker Drop.

Earlier I introduced Terada's facts, that is, quantifiers distributive over events can appear as an object and as a subject of unaccusative verbs, but not as a subject of unergative verbs. I will repeat the relevant examples in (21)a-c.

(21) In the distributive reading over events (one student per one event (= three events)):
a. Sensei-ga [$_{DP}$gakusei-o sannin] home-ta.
teacher-NOM student-OBJ three praise-PAST
"The teacher praised three students."
b. [$_{DP}$gakusei-ga sannin] ki-ta.
-NOM come-PAST
"Three students came."
c.*[$_{DP}$gakusei-ga sannin] hashit-ta.
run-PAST
"Three students ran."

However, the story does not end at this point. This type of distributive quantifier is ungrammatical and worse as the subject of an individual-level predicate than as the subject of an unergative verb.

(21) d.***[$_{DP}$gakusei-ga sannin] kashiko-katta.
clever-PAST
"There were three students who were clever."[12]

(21)d can not be interpreted as distributive by any means. Here, there is a three-way contrast again just like Case-Marker Drop. This type of contrast is also attested with the negative polarity quantifier ***daremo*** 'anybody', as you can see in (22).

(22) a. Sensei-ga daremo home-na-katta.
teacher-NOM anybody praise-not-PAST
"The teacher did not praise anybody."
b. Daremo ko-na-katta.
come-not-PAST
"There wasn't anybody who came."

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12. In the reading that the speaker encountered three separate events of meeting a clever student, a student being different each time.

c. *Daremo hashir-ana-katta.
run-not-PAST
"There wasn't anybody who ran."
d.***Daremo kashikoku-na-katta.
clever-not-PAST
"There wasn't anybody who was clever."

What type of quantifiers are these that have this interesting pattern of distribution? We will look into this in the next section.

4. Quantifiers in Japanese

First of all, we must note that the pattern that I described just now is not attested with non-floated quantifiers that come with a genitive marker *no* **before** the noun it is modifying and non-negative polarity ***daremo*** 'everybody' that requires the morphological realization of a case marker **after** it.

(23) a. [Sannin-no gakusei-ga] ki-ta.
three-GEN student-NOM come-PAST
b. [Sannin-no gakusei-ga] hashit-ta.
run-PAST
c. [Sannin-no gakusei-ga] kashiko-katta.
clever-PAST

(24) a. Daremo-ga ki-ta.
b. Daremo-ga hashi-ta.
c. Daremo-ga kashiko-katta.

(23),(24) show no contrast at all.

Now, if you look at the surface phrasal composition of the quantificational DPs in question, you can immediately see that we have the contrast if and only if the DP with a quantifier ends with a quantificational expression. In a Quantifier-Float case like *gakusei-ga sannin* 'three students', the DP ends with a quantifier *sannin* 'three people'[13], and negative-polarity *daremo* 'anybody' never cooccurs with a case marker. If the Japanese phrase structure is strictly head-final, then it is not implausible that these quantifiers are actually Ds in Japanese. Therefore, I will assume that there are two types of quantifiers in Japanese--those which are Ds (e.g. Quantifier-Float and negative-polarity *daremo*) and those which are Ns (e.g. non-floated quantifiers and non-negative-polarity *daremo*), and that it is D-quantifiers that show the contrast which I described earlier in this paper.[14]

Then, why do D-quantifiers and only D-quantifiers show the contrast? I will say that this is because D-quantifiers, without the morphological realization of case at the end, accept only an abstract Case given by the verb, just like an empty D does in the case of Case Marker Drop. N-quantifiers never show the contrast because the case on the DP is morphologically realized at the end, hence they are case-marked. I will go into the actual mechanisms in the next section.

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13. The fact that *gakusei-ga sannin* is a constituent can be shown by the following example, where the whole DP is Scrambled out:

(i) [$_{DP}$***Gakusei-o sannin***]$_i$ Ken-ga t$_i$ koroshi-ta.
student-OBJ three Ken-NOM kill-PAST
"Ken killed three students."

Therefore, we must at least say that such a type of floated quantifiers must be a part of the nominal phrase, not an adverb.

14. Emonds (1985) also analyzes quantifiers like *everybody, somebody* in English as instances of Ds based on their word-order relation with adjectives.

5. Analysis of Distribution Problem

There are several assumptions that I have to make in addition to what I have just argued. First, there is an ECM to SPEC(D) in the Q-Float Construction. For example, in object position as in (25)a, to the whole DP *gakusei-o sannin*, abstract Case is assigned under government by a verb, and to the SPEC of DP *gakusei-o*, an *o*-case which requires morphological realization is assigned.

(25) a. Object Position

$[_{VP}[_{DP}[_{SPEC}$gakusei-o] sannin] V]

Case-Marking

Note that I am assuming that a zero-case and an *o*-case are different, which was independently suggested by Kuroda (to appear).

What happens if the quantifier is used as a subject, as in (25)b?

(25) b. Subject Position

$[\ldots[_{DP}[_{SPEC}$gakusei-ga] sannin]...I]

Suppose that *ga* is assigned by INFL, though this is not crucial to the argument in this paper. To *gakusei-ga*, the SPEC of the DP, a *ga*-case which requires morphological realization is assigned by I. However, *gakusei-ga sannin* rejects the nominative case, because it ends with a D-quantifier and there can be no morphological realization of a case. Therefore, everything depends on where the subject is generated. If the subject is the subject of an unaccusative predicate, then the subject is in the complement of the verb and is Case-marked by the verb. However, in the other cases an abstract Case can not be assigned to the subject, because the subject is not sister to the verb. Therefore, the D-quantifier as the subject of unergatives and individual-level statives is worse because of a Case-Filter violation.

Secondly, we have to speculate about the syntactic status of variables to account for the contrast between D-quantifiers as the unergative subject and the individual-level subject. Recall the D-quantifiers in these subject positions are not case-marked by any means. QR at LF from these subject positions leaves a non-case-marked trace which is a DP, basically along the lines of Pesetsky (1982). Because it is not case-marked, it ***must*** look for an antecedent which is a case-marked A-binder to satisfy the Case-Filter. However, after QR, the moved D-quantifier is in the A'-position, a non case-marked position. Because a non-case-marked trace in an A-position behaves as an NP- (DP-)trace, the antecedent-trace relation between this trace and the D-quantifier in an A'-position can not be established.

(26) (Suppose that QR is an adjunction to IP.)

$[_{IP}[_{DP}$gakusei-ga sannin$_i$$][_{IP}\ldots[_{SPEC(I\ or\ V)}[_{DP}t_i]]\ldots]]$

A'-Position ***Not case-marked***

X

No Antecedent-Government Relation

As a consequence, it turns out that the trace is *not* antecedent governed. Because the trace is not antecedent-governed, to license the trace, lexical government is required. With the unergative subject, lexical government is possible because the subject is still inside VP, therefore there is only a Case Filter violation. However, with an individual-level subject, both Case Filter and ECP Violations are attested, because the SPEC(I) subject is never lexically governed. Here again, we can account for the pattern of D-quantifiers in a way parallel to Case-Marker Drop, which requires a DP analysis. This result strongly suggests that some quantifiers, D-quantifiers, in Japanese are actually a D, the head of DP. How about N-quantifiers? They do not show any contrast depending on the position of the subject because they always end with a case-marker, and hence, are case-marked. Therefore, after QR, there is no problem in

establishing an antecedent-trace relation.[15]

6. Implications

The analysis in this paper implies the following. First, three "subject" positions are necessary. This will be additional supporting evidence for the VP-internal subject.

Second, there are hierarchical levels of subjects. This is conceptually incompatible with Fukui (1986), where **no** differences among subjects are predicted.

Third, the analysis here gives further support for "case marker = D" in Japanese, and I suggested a typology of Ds according to grammatical functions--a case-marker vs. the other Ds that require an abstract Case given by a verb.

Fourth, a zero-Case and a morphologically-realized *-o* are separate cases assigned by the verb.

Fifth, the analysis depends on the assumption that incorporation of verbs into I can **not** be at S-Structure, contrary to Kitagawa's (1986) suggestion. If it is at S-Structure as in (27), the V-I complex must be able to lexically govern SPEC(I), and there should not be the contrast that I described.

(27) $[_{IP}[_{SPEC}$DP] VP V-I]

This suggests that at least INFL must be separate from the other part of the verbal complex in Japanese at S-Structure.[16]

Finally, as suggested in the introduction of works by Kuroda and Diesing, the distinction of subject positions proposed here might be related to ***wa/ga***-interpretation problem, which is one of the hardest problems in Japanese syntax and semantics. However, we have to wait for future investigations into this matter.

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References

Abney, S. (1987) *The English Noun Phrase in Its Sentential Aspect.* PhD Thesis, MIT, Cambridge.

Chomsky, N. (1981) *Lectures on Government and Binding.* Dordrecht, Foris.

Diesing, M. (1988) "Bare Plural Subjects and the Stage/Individual Contrast." ms., UMass, Amherst. To appear in the Proceedings of the Tübingen Conference on Generics, Tübingen, Seminar für Natürliche Sprachverarbeitung, Universität Tübingen.

Emonds, J. (1985) *A Unified Theory of Syntactic Categories.* Dordrecht, Foris.

Fukui, N. (1986) *A Theory of Category Projection and Its Applications.* PhD Thesis, MIT, Cambridge.

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15. For the same reason, wh-elements in Japanese, which always end with a case marker, do not show any contrast. (Thanks go to John Whitman for raising this question.) This might imply that the semantic correlate of the distinction between D- and N-quantifiers is not so straightforward, because wh-elements in Japanese can be quantificational without losing a case particle.

16. Yoshihisa Kitagawa (personal communication) suggested that the analysis of the verbal complex here goes well along with Kitagawa (1986), because in Kitagawa's theory I is separate from V at LF, so that the result I described in this paper can be accounted for in terms of ECP. Then, the question will be: How, in Kitagawa's theory, do we derive the difference in the properties of subjects?

Gil, D. (1987) "Definiteness, Noun Phrase Configurationality, and the Count-Mass Distinction." Reuland, E. J. and A. G. B. ter Meulen (eds.) *The Representation of (In)definiteness.* Cambridge, MIT Press, pp. 254-269.

Inoue, K. (1976) *Henkê-Bunpô-to Nihongo.* Tokyo, Taishûkan.

Kitagawa, Y. (1986) *Subjects in Japanese and English.* PhD Thesis, MIT, Cambridge.

Kratzer, A. (1988) "Stage-Level and Individual-Level Predicates." Paper read at the Tübingen Conference on Generics. To appear in the Proceedings of the Conference, Tübingen, Seminar für Natürliche Sprachverarbeitung, Universität Tübingen.

Kubo, M. (1987) "Wh-Movement in Japanese NPs." A paper read at the 17th Meeting of Western Conference on Linguistics, University of Washington, Seattle.

Kuno, S. (1973a) *The Structure of the Japanese Language.* Cambridge, MIT Press.

____ (1973b) *Nihon-Bunpô-Kenkyû.* Tokyo, Taishûkan.

Kuroda, S. (1965) *Generative Grammatical Studies in the Japanese Language.* PhD Thesis, MIT, Cambridge.

____ (1969) "Remarks on the Notion of Subject with Reference to Words like *Also, Even,* or *Only*: Illustrating Certain Manners in Which Formal Systems Are Employed as Auxiliary Devices in Linguistic Descriptions." *Annual Bulletin of the Research Institute of Logopedics and Phoniatrics.* 3, pp. 111-130, 4, pp. 127-152.

____ (1972) "The Categorical and the Thetic Judgment: Evidence from Japanese Syntax." *Foundations of Language* 9.2., pp. 153-185.

____ (to appear) "Whether We Agree or Not: A Comparative Syntax of English and Japanese." To appear in *Linguisticae Investigationes* XII.

Pesetsky, D. (1982) *Paths and Categories.* PhD Thesis, MIT, Cambridge.

____ (1987) "Wh-In-Situ: Movement and Unselective Binding." Reuland, E. J. and A. G. B. ter Meulen (eds.) *The Representation of (In)definiteness.* Cambridge, MIT Press, pp. 98-129

Ross, J. R. (1967) *Constraints on Variables in Syntax.* PhD Thesis, MIT, Cambridge.

Saito, M. (1983) "Case and Government in Japanese." *WCCFL* 2, pp. 247-259.

____ (1985) *Some Asymmetries in Japanese and Their Theoretical Implications.* PhD Thesis, MIT, Cambridge.

Selkirk, E. O. (1984) *Phonology and Syntax: The Relation between Sound and Structure.* Cambridge, MIT Press.

Stowell, T. (1981) *The Origin of Phrase Structure.* PhD Thesis, MIT, Cambridge.

Tateishi, K. (1988a) "SPEC in Japanese and Universality of X'-Theory." ms., UMass, Amherst.

____ (1988b) "On the Universality of X'-Theory: The Case in Japanese." *WCCFL* VII, pp. 331-345.

Terada, M. (1986) "Unaccusativity and QPs in Japanese." ms., UMass, Amherst.

____ (1987) "Unaccusativity in Japanese." *NELS* 17, pp. 619-640.